PATENT COOPERATION TREATY

PCT

REC'D 1 9 APR 2006

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY WIPO

(Chapter II of the Patent Cooperation Treaty)

(PCT Artcle 36 and Rule 70)

Applicant's or agent's file reference . P04E4016PCT	FOR FURTHER ACTIO	N See Form PCT/IPEA/416					
International application No. PCT/KR2004/001044	International filing date(day/n) 06 MAY 2004 (06.05.2	004) 26 NOVEMBER 2003 (26.11.2003)					
International Patent Classification (IPC H04B 7/26(2006.01)i) or national classification and	PC					
Applicant ELECTRONICS AND TELE	COMMUNICATIONS	RESEARCH INSTITUTE et al					
This report is the international p Authority under Article 35 and in	reliminary examination report, transmitted to the applicant acco	established by this International Preliminary Examining ording to Article 36.					
2. This REPORT consists of a tota	l of 3sheets, inc	cluding this cover sheet.					
sheets of the de and/or sheets of Administrative sheets which subeyond the disc	nd to the International Bureau) escription, claims and/or drawin entaining rectifications authoriz Instructions). upersede earlier sheets, but whic closure in the international appli Box.	sheets, as follows: gs which have been amended and are the basis for this report ed by this Authority (see Rule 70.16 and Section 607 of the th this Authority considers contain an amendment that goes cation as filed, as indicated in item 4 of Box No. I and the cate type and number of electronic carrier(s))					
containing a sequence	listing and/or tables related the nee Listing (see Section 802 of srelating to the following items:	reto, in electronic form only, as indicated in the Supplementar the Administrative Instructions).					
Box No. II Priority							
Box No. II Priority Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability							
ا ا	unity of invention						
No V Reasone							
Box No. VI Certain	documents cited .						
	Box No. VII Certain defects in the international application						
Box No. VIII Certain	observations on the internationa	l application					
Date of submission of the demand		Date of completion of this report					
27 APRIL 2005	(27.04.2005)	21 MARCH 2006 (21.03.2006)					
Name and mailing address of the IP Korean Intellectual Pro 920 Dunsan-dong, Seo- Republic of Korea	perty Office	Authorized officer KIM, Sang Woo					
Facsimile No. 82-42-472-7140		Telephone No. 82-42-481-8324					

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/KR2004/001044

ox No. I	Basis of the report						
	the language in which it was filed unless						
With a	With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.						
\bowtie	This report is based on translations from the original language into the following language English						
	which is the language of a translation furnished for the purposes of:						
	international search (under Rules 12.3 and 23.1(b))						
	publication of the international application (under Rule 12.4)						
	international preliminary examination (under Rules 55.2 and/or 55.3)						
to the annex	regard to the elements of the international application, this report is based on (replacement sheets which have been furnished receiving Office in response to an invitation under Article 14 are referred to in this reort as "originally filed" and are not seed to this report): the international application as originally filed/furnished						
التسكا التسكا							
	the description: pages as originally filed/furnished						
	nages* received by this Authority on						
	pages* received by this Authority on						
_							
	the claims: as originally filed/furnished						
	pages						
	pages* as amended (together with any statment) under Article 19 pages* received by this Authority on						
	pages* received by this Authority on						
	pages* received by this Authority on						
	the drawings:						
	as originally filed/furnished						
	pages*received by this Authority on						
•	pages*received by this Authority on						
	the sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing. The amendments have resulted in the cancellation of:						
3.	the description, pages						
	the claims, Nos.						
	the drawings, sheets						
	the sequence listing (specify):						
	any table(s) related to sequence listing (specify):						
4.	This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)). the description, pages						
* If ite	em 4 applies, some or all of those sheets may be marked "superseded."						

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/KR2004/001044

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;
	citations and explanations supporting such statement

,	Statement				
1.		.	1-9		YES
	Novelty (N)	Claims	1-7		NO
		Claims			
	Itive step (IS)	Claims	1-9		YES
	Inventive step (IS)	Claims			МО
	•			. ·	
	Industrial applicability (IA)	Claims	1-9	 	YES
	٠.	Claims		<u> </u>	NO

2. Citations and explanations (Rule 70.7)

A. Novelty and Inventive step

The present invention discloses a mobile IPv6 fast handover method. The fast handover method of the present invention performs fast movement detection by using layer 2 information simply and efficiently for fast handover in the mobile IPv6 and generates CoA in the access router instead of the mobile node without operations of many additional messages.

The following documents are made for references;

D1: US 2003/0104814 A (Docomo Communications Laboratories USA)

D2: WO 03/092316 A (Nokia Corp.)

D1 shows a tunneling handoff process that can minimize the handoff latency associated with the standard Mobile IP registration. A tunnel in D1 is set up between two mobility serving nodes, source and target nodes. The tunnel is used for communication between a mobile node and the source node after the mobile node completes an L2 handoff from the source node to the target node but before completing the standard Mobile IP L3 registration process or undergoing IP routing update with the target node. D2 shows a method for supporting relocation of an IP session during a network layer handover in a mobile communication system. Application context information indicates activities that are advantageously executed pro-actively before the network layer handover is sent. The indicated activities are then pro-actively executed in a receiving network node.

Claims 1–9 of the present invention meet the criteria set out in PCT Article 33 (2)–(3) in that neither of these documents nor any combination of them can teach or fairly suggest the main characteristics of the present invention: <u>Performing fast movement detection by using layer 2 information</u> and <u>generating CoA in the access router</u> instead of the mobile node.

B. Industrial applicability

The present invention including claims 1-9 suggests a method that can be used widely in a general mobile communication system, meeting-the criteria set-out-in-PCT Article 33 (4).